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*AN ART CONSERVATION EQUIPMENT COMPANY*

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*EQUIPMENT, SUPPLIES, AND SERVICES FOR INSTITUTIONS AND INDIVIDUALS*

## **Outdoor Sculpture Wax Application Recommendations**

A wax barrier may help prevent harmful atmospheric pollutants from contacting and reacting with the surface of a sculpture, plaque or other outdoor fixture in need of a protective coating. The application described herein is one way to provide these sacrificial layers of protection. Other techniques may be useful; it is recommended to do research before beginning any cleaning/conservation procedure on works of art.

### **Application:**

Apply as needed to restore maximum protection following the removal of older wax coatings. It is recommended to evaluate coatings at least twice per year (Spring and Fall) to see if new coatings are required.

### **Safety Precautions:**

AVOID REPEATED OR PROLONGED SKIN CONTACT.

ALWAYS wear rubber gloves when handling mineral spirits. If any wax or chemical is splashed onto the skin, wash immediately with soap and water.

Molten wax is a burn hazard; wear protective clothing as designated on the material's Safety Data Sheet. Consult the Safety Data Sheet for flashpoint information; do not exceed the recommended temperatures when heating the wax.

### **Supplies needed:**

- A petroleum distillate; common names include Mineral Spirits, Benzine(not Benzene); Naphtha; Petroleum spirits; Solvent naphtha.
- Rags, clean soft, lint free, unsized, (such as old T-shirts or toweling)
- Paper towels, lint free, such as Kimwipes (Fisher Scientific Company), or approved equal.
- Portable, hand-held propane torches for heating of the sculpture
- Large Hogshair brushes for application
- Wax melting pot

### **Procedure:**

Step 1: Clean the sculpture to remove dirt and surface accretions. This may involve soap and water, just water or other cleaning agents. Ensure that dirt is removed from all nooks and crannies on the sculpture. Once cleaning is complete, wash the entire surface with clear water to remove any remaining soap or cleaning products. Allow to dry completely.

**Note:** Never use abrasive cleaning pads, steel wool, or sand paper on a bronze sculpture. Use of such materials could mar the surface of the sculpture.

Step 2. Using a wax melting pot, heat the wax until melted into a liquid. Do not exceed the flash point temperature of the wax as described on the Safety Data Sheet. Do not overfill the wax melting pot.

Step 3. OPTIONAL: Add BTA(Benzotriazole), if needed, according to the manufacturer's guidance. It is recommended to not exceed a 3% solution (97% wax to 3% BTA).

Step 4: Remove from heat. Add mineral spirits as desired to wax solution as it cools to make a creamy, paste wax mixture. More mineral spirits will make a softer wax, but it will take longer to harden after application.

Step 5. Using the large hogshair brushes, brush the wax onto the heated surface, thoroughly coating the surface. Use a circular motion to rub the wax into the surface of the metal in a thin, uniform coat. Take necessary precautions to contain all drips with clean rags or paper towels to prevent the wax from coming in contact with adjacent materials.

Step 6. Allow to cool and dry thoroughly. Most wax coatings are dry (solvent evaporated) within 20 minutes.

Step 7. Buff with a cotton rag. Care should be taken so that the buffing only polishes the wax and does not rub through the wax or the statue's patina.

**Note:** If a white film develops in any of the creviced areas (film is easily scraped off with a fingernail) the coat of wax applied is too heavy. If this happens, the excess can be thinned out with a Naphtha solvent, wiped and re-waxed with a fine coat, and re-buffed.

Step 8. Repeat if desired.

**NOTE:** The procedure depicted in this instructional is intended only as a recommendation for one technique of applying a wax sacrificial coating to outdoor bronze. Different surfaces and situations may require different procedures. All work to be undertaken with outdoor sculpture wax should be evaluated by a professional before action is taken. Museum Services Corporation bears no responsibility for the applications of this product.

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